

surgery, non-operative admission, additional investigations recommended, opinion without further investigations, unnecessary consult). Results: There were 1916 consultations reviewed, with 52% of calls (n=991) originating outside of our hospital, and 72% (n=1387) coming from an emergency department. Cranial cases made up 64% (n=1230) of consults, while the remaining 36% (n=688) were spine cases. The mean patient age was 60.1±0.4 years. In multinomial logistic regression analysis, age, geographical distance of consulting site, and consult specific variables (neurosurgical subspecialty, inside vs. outside call, emergency department vs. inpatient ward or private office) were associated with consult disposition ( $p < 0.001$ ). Conclusions: This study provides a descriptive analysis of neurosurgical consultations in Nova Scotia. Results from this study may be used to address inefficiencies in the neurosurgical consultation process, including targeted education for consulting physicians.

### P.138

#### Burnout in Canadian neurosurgery

*J Skulsampaopol (Toronto)\* S Shitsama (Nairobi) MD Cusimano (Toronto)*

doi: 10.1017/cjn.2024.239

Background: Burnout is common among health care professionals and can lead to depression and poor patient outcomes. The prevalence of burnout among Canadian neurosurgeons and trainees is yet unknown. Methods: International survey of neurosurgeons and trainees Results: Of total 403 responses, 47 were Canadian respondents (80.9% were male and 14.9% were female). Rate of burnout among Canadian neurosurgeons and trainees was 42.6%; however, there was no significant difference between rate of burnout between Canadian respondents and non-Canadian respondents (35.3%),  $p=0.33$ . Rate of burnout among Canadian neurosurgeons and resident/fellow was 40 and 47.1%, respectively,  $p=0.64$ . Subgroup analysis showed no difference in rate of burnout between Canadian and non-Canadian practicing neurosurgeons ( $p=0.34$ ) and Canadian and non-Canadian resident/fellow ( $p=0.76$ ). Canadian neurosurgeons with work experience of 5-10 years are more likely to have burnout compared to neurosurgeons with more or less work experience (OR 17, 95%CI 1.43-826.22,  $p=0.005$ ). There was a trend that female Canadian respondents had more burnout than male counterparts (OR 4.2, 95%CI 0.57-47.45,  $p=0.09$ ). Conclusions: Burnout is not uncommon among Canadian neurosurgeons/trainees. Monitor and supports should be provide to those who are at risk to mitigate burnout and provide resilience.

### P.139

#### The use of tranexamic acid in craniotomy: a Canadian survey and literature review

*S Jung (Halifax)\* L Julien (Halifax) SD Christie (Halifax) SP Lownie (Halifax)*

doi: 10.1017/cjn.2024.240

Background: There is growing evidence supporting the intraoperative use of an antifibrinolytic agent, tranexamic acid (TXA) to limit blood loss; however, use of TXA has not been widely adopted in cranial procedures. We aimed to determine the practice pattern regarding the use of TXA in craniotomy in Canada, and review the

literature. Methods: A survey was conducted among the Canadian centres on TXA use during elective craniotomy. Online databases were searched for randomized controlled trials reporting the use of TXA in craniotomy for tumors. The results included the estimated blood loss and the dose used. Results: TXA was not routinely used in elective craniotomy but used selectively in 6 of 15 centres based on risk, intraoperative bleeding, or surgeon preference. The dose was 1 g with or without infusion. 6 studies were identified through literature search. The dose varied between 10–20 mg/kg bolus and 1 mg/kg/hr infusion, or a 2 g bolus alone. All studies reported a significant reduction in blood loss with TXA. Conclusions: We found widely divergent indications for intraoperative TXA use in elective craniotomy throughout Canada. This is in keeping with limited evidence in the literature. Further studies are needed to inform the decision regarding TXA use.

### P.140

#### The clinical outcomes of patients with normal pressure hydrocephalus and fecal incontinence

*HK Cheema (Ottawa)\* E Torio (Milwaukee)*

doi: 10.1017/cjn.2024.241

Background: Normal Pressure Hydrocephalus (NPH) is characterized by the clinical triad of dementia, gait disturbance, and urinary incontinence. An initial case series by Hakim and Adams highlighted that all patients exhibited this triad, with only one presenting with fecal incontinence. This study aims to examine the outcomes of individuals experiencing fecal incontinence who have undergone ventriculoperitoneal shunting (VPS). Methods: A systematic review and surgical case series was conducted, involving consecutive adults diagnosed with NPH and treated with VPS between September 2016 and September 2022. Results: In the cohort of 85 patients, the median duration of NPH symptoms was 3.2 years. Gait and balance symptoms were prevalent in all patients, while cognitive, bladder, and bowel symptoms were observed in 85.9%, 91.8%, and 23.5% of cases. No significant differences were noted in age, sex, neurologic diseases presence, or lower gastrointestinal or pelvic pathology. The prevalence of fecal incontinence pre-surgery, within less than 3 months, and 3 months post-surgery were 23.5%, 32.9%, and 17.6%. The systematic review search yielded 515 articles, and 18 included patients with fecal incontinence. Conclusions: The insights gained from the systematic review and cohort offer a comprehensive understanding of the outcomes observed in patients with NPH and fecal incontinence following VPS.

### P.141

#### Endoscopic transorbital approach to the skull base: a single centre experience

*ME Yasuda (Hamilton)\* J Moore (HAMILTON) T Nguyen (HAMILTON) Y Alammr (HAMILTON) MA Mohd Slim (HAMILTON) A Mastrodonardo (HAMILTON) D Sommer (HAMILTON) K Reddy (HAMILTON)*

doi: 10.1017/cjn.2024.242

Background: Minimally invasive endoscopic techniques via the transorbital approach (ETOA) have emerged as a promising